

GAS FIRED UPFLOW FURNACE



BURNER & CONTROL

ACCESS

ACCESS DOOR FILTER AND BLOWER

BOTTOM RETURN
OPENING

Product Data 394U Sheet Size 80 Series B

OPTIONAL

REAR DROP

BASEMENT APPLICATIONS

394

FILTER ACCESS

PDS 394U.80.2 4/25/67

DISCHARGE OPENING

LOW VOLTAGE BOTH SIDES

> - 221 - 26 -

CLEARANCES FROM COMBUSTIBLES

In "large" rooms

- 6" from casing & vent hood
- 1" from sides & top of supply plenum

In confined spaces

- 0" from casing sides, rear & bottom
- 6" from casing front & type C vent connector
- 3" from top & sides of uninsulated supply plenum

SHIPPING WEIGHT

160 lbs.

STANDARD GAS CONTROL OPTIONS

Control Type	Gas	
$\mathbf{D2}$	LPG	100% shut-off automatic pilot; Bryant diaphragm valve; transformer.
D4	City	Bryant diaphragm valve; Bryant automatic pilot; gas pressure regulator; transformer.
D5	City	100% shut-off for natural gas. Same as D4 except uses thermocouple pilot and pilot relay.

HEATING RATINGS AND CAPACITIES

Rating ¹	${f Input^2}$	BTUH	80,0003	
	Output	BTUH	64,000	

¹Ratings are for elevations up to 2000 ft.; for higher altitudes, reduce ratings 4% for each 1000 ft. above sea level.

L —Multi-speed direct drive heating—minimum cooling

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M—Multi-speed direct drive heating—minimum cooling with evaporator blower motor relay

DRIVE TYPES

E —Multi-speed direct drive heating—maximum cooling with evaporator blower motor relay

CON	IEGIIONS	
Gas Supply NPT Natural		%
-Propane		2 ½.
Electric Supply—Direct D	Ď√Ø Ø	120-60-1
Branch Circuit Wife Siz	AWG/	1 4 1
Fuse Size	AMPS	15
Control Circuit Power Ava	ulk*) i 🔻	
Type L	VA	1 10.8
Type M or E	ンクを	7-2
Flue Size	Inches	4 (Oval)
Duct—Inlet at bottom \	DxW	22¼ x 12¼
Inlet ext. filter rack	HxW	12 x 23
Inlet drop duct	D x W	12 x 14 1/8
Discharge	D x W	20 x 145/8
w177 (7 (7)		

^{*}External to unit

COMPONENT INFORMATION

Motor—Type L or M—4 Speed	1/8 HP (Sh. Pole)
Power Supply	120-60-1
Full Load Amps_	6.3
Speed & Rotation	1050 CCW*
Motor—Type E—4 Speed	¼ HP (PSC)
Power Supply	120-60-1
Full Load Amps	5.4
Speed & Rotation	1075 CCW*
Blower Wheel Dia. & Width	10" x 6"
Bore—Direct Drive	1/2 "
Filter—Fiberglass**	
Inlet At Bottom	14" x 25" x 1"
External Filter Rack	14" x 25" x 1"
Internal Side Filter	14" x 25" x 1"
Rear Drop Duct	14" x 25" x 1"

^{*}Rotation viewed from end opposite shaft

CONTROL INFORMATION

Burners (Steel Slotted Port)	3
Orifice Drill Size Prop.	54
Nat.	40
D2 Control (Prop.) Regulator	None Required
Valve	½ A641
Escapement Orifice Drill Size	80
Pilot—MH Q314A	.011 Orifice
D4 Control (Nat.) Regulator	Comb. Thermac ½ VR-1
Valve	½ A641
Escapement Orifice Drill Size	80
Pilot—732	.016 Orifice
D5 Control (Nat.) Regulator	Comb. Thermac ½ VR-1
Valve	½ A641
Escapement Orifice Drill Size	80
Pilot—MH Q314A	.018 Orifice

Manual Shut-off Cock and Pilot Cock are standard equipment. Supplied as separate parts except where included as integral part of the combination regulator.

²20% reduction in input allowed.

³For LP Gas, model designated 80-V-394, A.G.A. Input 75,000, Output 60,000.

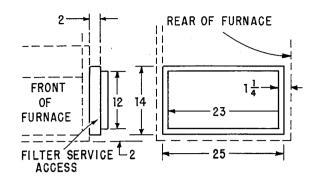
^{**}Use multi-velocity filters above 875 CFM

Optional External Filter Rack Mounts on Either Side

AIR FLOW FOR INDICATED AIR TEMPERATURE RISE*

TEMP RISE °F	70	75	. 80	85	90	95	100
AIR FLOW CFM	795	741	695	654	618	585	556

*At Rated Input

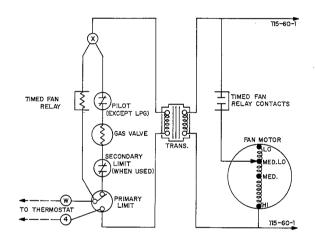


AIR DELIVERY PERFORMANCE ‡

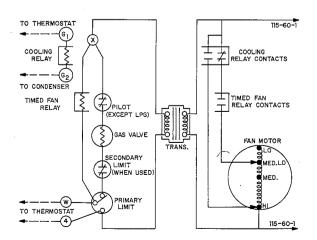
Air	EXTERNAL STATIC PRESSURE AVAILABLE							
Delivery	Type L or M Motor				Type E Motor			
CFM	Hi	Med	Med-Lo	Lo	Hi	Med	Med-Lo	Lo
500	.88	.78	.70	.58				.77
600	.76	.65	.52	.06				.61
700	.63	.47					.78	.27
800	.48						.60	
900	.16					.74	.33	
1000					.76	.58		
1100					.63	.38		
1200					.46	.14	-	
1300					.27			
1400					.07			

Above data gives Cfm under typical field applications (i.e. 125 volts).

LINE-TO-LINE SCHEMATIC UNIT WIRING DIAGRAMS



Type L



Types M or E